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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SELBY, GEVELL V

ART UNIT PAPER NUMBER

2615

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,058

Applicant(s)

BRANDENBERGER ET AL.

Examiner

Gevell Selby

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 21-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/5/06 have been fully considered but they are not persuasive. The applicants submit that the prior art does not disclose the following limitations of the claimed invention:

1) a processor configured to process said pixel data in response to selected color image filter to provide filtered image data, as claimed in claim 1;

2) selecting a first filter on a digital recording device; selecting a second filter on a digital recording device; combining said first filter and said second filter to create a combined filtering effect, as claimed in claim 15 . The Examiner respectfully disagrees.

Examiner's Reply:

2. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to modify Anderson in view of Kim to have an input device and processor to process a filtered effect in the image, in order to provide the user with the added feature of being able to edit the image to the color of their choice without the use of color filters, thus reducing the space needed to provide the filtering options.

Modifying the Anderson reference to have the features of the Kim reference would not change the principle operation of Anderson, because the color subcarrier and burst signal are not incompatible with the signals of Anderson and can be used in combination as seen in the Kim reference. The Kim reference shows that the signal entering the color processor (117) is a separated YCC signal and both analog and digital data are used with the use of A/D and D/A converters (see column 1, lines 23-52 and column 2, lines 50-53).

Re claims 1, 3, and 6) The Kim reference a color filter device connects in parallel with a color processor (117) (see figure 2). The image data processed by the color processor is used when no filtering is selected and the image data is processed by the controller (211) or processor by being replaced with the filtering effect color data when filtering is selected (see column 3, line 63 to column 4, line 7). Therefore, the Kim reference discloses a processor configured to process said pixel data in response to selected color image filter to provide filtered image data.

Re claim 15) The Kim reference discloses the same function of the color filter is performed by changing a color signal while maintaining the luminance in the video signal in its original state (see column 3, lines 40-45). The color selection key (222) allows the user to select a desired color represent in the color vector scope (see column 3, lines 45-60). Each color in the memory represents the original image data with the combined filtering effect of a first filter with a B-Y color filtering effect and a second filter with a R-Y color filtering effect (see column 3, lines 51-50). Therefore, the Kim reference teaches the limitations claimed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 2, 4, 5, and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, US 6,683,649, in view of Kim, US 6,137,532.**

In regard to claim 1, Anderson, US 6,683,649, discloses a digital camera (see figure 1) comprising:

an optical lens system providing an optical image (see column 5, line 34),
an image sensor sensing simultaneously multi-color pixel data corresponding to said optical image (see column see column 4, lines 11-14: it is inherent the senses simultaneously multi-color pixel data because the pixels are arranged in the Bayer format);

an input device (see figure 1, element 140) configured to respond to a manual input (see column 9, lines 44-46); and

a processor (see figure 1, element 116) configured to process said pixel data (see column 4, lines 18 and 19).

The Anderson reference does not disclose an input device configured to respond to a manual input selecting one of a plurality of image filters and a processor configured to process said pixel data in response to said selected image filter to provide filtered image data.

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Kim, 6,137,532, discloses a color filter device of a digital camera which comprises an input device (see figure 2, element 222) configured to respond to a manual input selecting one of a plurality of image filters (see column 4, lines 7-10) and a processor (see figure 2, elements 211-217) configured to process said pixel data in response to said selected image filter to provide filtered image data (see column 3, lines 21-27 and column 3, line 63 to column 4, line 7: The image data processed by the color processor is used when no filtering is selected and the image data is processed by the controller (211) or processor by being replaced with the filtering effect color data when filtering is selected).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532 to have an input device configured to respond to a manual input selecting one of a plurality of image filters and a processor configured to process said pixel data in response to said selected image filter to provide filtered image data, in order for the user to be able to edit the image to have a selected color without the use of a color filter, thus reduces the space needed to provide several color filter options.

In regard to claim 2, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1 further comprising:

a display configured to provide a visual display of said filtered image data (see figure 2, element 140); the input device is a touch sensitive overlay provided on said display (see column 9, lines 43-46).

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In regard to claim 4, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Anderson discloses wherein the image sensor is a color Charged Coupled Device array (CCD) (see column 4, lines 10-14).

In regard to claim 5, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Anderson discloses wherein the input device includes menu options (see figure 4A, element 310 and column 9, lines 44-47).

In regard to claim 7, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Kim discloses wherein a subset of said plurality of image filters are selectable by said input device and said processor is configured to provide a composite filter effect in response to selected ones of said subset (see figure 3 and column 3, lines 39-60).

In regard to claim 8, Anderson, US 6,683,649, discloses an apparatus for recording digital images (figure 1) comprising:

- a graphic user interface menu (see figures 13-17) displaying a selection of an editing effect available on a digital visual recording device (see column 14, line 5+);

- a processor (see figure 1, element 116) configured to perform an adjustment of the properties of said digital visual recording device (see column 5, lines 40-52); and

- an output providing an electronic representation of the edited image (see column 9, lines 1-13).

Anderson does not disclose editing and displaying an image using digital color filtering.

Kim, 6,137,532, discloses a color filter device of a digital camera which comprises an input device (see figure 2, element 222) configured to respond to a manual input selecting one of a plurality of image filters (see column 4, lines 7-10) and a processor (see figure 2, element 214) configured to process said pixel data in response to said selected image filter to provide filtered image data (see column 3, lines 21-27).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532 to have a color filter device wherein a color filtering option is displayed on the GUI, the processor adjusts the images with the selected filtering, and the display displays the filtered image, in order for the user to be able to edit the image to have a selected color without the use of a color filter, thus reduces the space needed to provide several color filter options.

In regard to claim 9, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 8. Anderson discloses wherein said menu is configured to provide a hierarchical display of said filter effects (see figures 13-17, elements 308a, b, and c).

In regard to claim 10, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. The Anderson reference discloses wherein said processor is configured to provide a preview of a filtered image (see figure 13, element 440 and 404: It is implied with the combination of Anderson and Kim will display the filtered image in window 440 when preview mode (404) is selected).

In regard to claim 11, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. Anderson discloses wherein said output includes a removable data storage media (see figure 1, element 122) capturing said electronic representation (see column 6, lines 20-21).

In regard to claim 12, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. Kim discloses wherein said filter effects include one of effects filters, technical filters, and correction filter (see column 2, lines 8-22: the color filter serves as both of or one of an effects filter and correction filter when editing the image).

In regard to claim 13, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. Kim discloses wherein said effect filters include variations in color intensity (column 5, lines 13-35).

In regard to claim 14, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 9. Kim discloses the processor selectively inhibits said filter effect in response to said input (see column 3, lines 28-37: when the original image signal is selected, the filtered signal is inhibited).

5. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, US 6,137,532, in view of Anderson, US 6,683,649.

In regard to claim 15, Kim, US 6,137,532, discloses a method of combining filter effects into digital photography, said method comprising:

selecting a first filter (see figure 3: R-Y) on a digital recording device;

selecting a second filter (see figure 3: B-Y) on a digital recording device;

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combining said first filter and said second filter to create a combined filtering effect (see column 3, lines 51-60: Red green and blue are combinations of the color difference signals);

adjusting properties of said digital recording device to include combined filtering effects (see column 4, lines 1-7).

Kim does not disclose:

outputting an image on an electronic media of said digital visual recording device which includes said combined filtering effects;

recording an image on an electronic media of said digital visual recording device which includes said combined filtering effects.

Anderson, US 6,683,649, discloses a method outputting digital photographing comprising:

outputting an image on an electronic media (see figure 1, element 140) of said digital visual recording device which has been edited (see column 9, lines 1-13) and

recording an image on an electronic media (see figure 1, element 122) of said digital visual recording device which has been edited (see column 6, lines 51-53 and column 9, lines 1-13).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Kim, US 6,137,532, in view of Anderson, US 6,683,649, to have the color filter device in a digital camera that performs outputting an image on an electronic media of said digital visual

recording device which includes said combined filtering effects and recording an image on an electronic media of said digital visual recording device which includes said combined filtering effects, in order for the user of the camera to be able to edit the image to have a selected color without the use of a color filter, thus reduces the space needed to provide several color filter options. Therefore, the combination of Anderson in view of Kim would provide for all the limitations of the method claimed in claim 1.

In regard to claim 16, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the digital camera of claim 15. Anderson discloses wherein said menu is configured to provide a hierarchical display of said filter effects (see figures 13-17, elements 308a, b, and c).

In regard to claim 17, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the method of claim 15. Anderson discloses wherein adjusting properties of said digital recording device includes providing a preview of said image which includes the filter effects (see figure 14, element 404 and 440: When preview (404) is selected the edited image is displayed in the window (440), thus it is implied with the combination the filtered image can also be previewed).

In regard to claim 18, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the apparatus of claim 15. Anderson discloses wherein said output includes a removable data storage media (see figure 1, element 122) capturing said electronic representation (see column 6, lines 20-21).

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In regard to claim 19, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the method of claim 15. Kim discloses wherein said filter effects include one of effects filters, technical filters, and correction filter (see column 2, lines 8-22: the color filter serves as both of or one of an effects filter and correction filter when editing the image).

In regard to claim 20, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the method of claim 15. Kim discloses wherein said effect filters include variations in color intensity (column 5, lines 13-35).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, US 6,683,649, in view of Kim, US 6,137,532, as described in regard to claim 1, and further in view of Shiomi, US 6,650,361.

In regard to claim 3, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Neither reference discloses the camera comprises:

an image storage configured to implement lossy compression of said filtered image data to provide compressed image data, and store said compressed image data.

Shiomi, US 6,650,361, discloses a digital camera that uses lossy compression as a compression method and then stores the image in a memory (see column 11, lines 56-58). If lossy compression is done using Discrete Cosine transform to transform and quantize image data in the respective blocks into two-dimensional frequency data, the image data volume can be greatly reduced (column 11, lines 59-65).

It would have been obvious to a person of ordinary skill in the art to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532, and further in view of Shiomi, US 6,650,361, to use lossy compression and store the compress data in memory, in order to reduce the image data volume to be stored as taught by Shiomi.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, US 6,683,649, in view of Kim, US 6,137,532, as described in regard to claim 1, and further in view of Safai et al., US 6,167,469.

In regard to claim 6, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Neither reference discloses a voice processor configured to respond to voice commands.

Safai et al., US 6,167,469, discloses a digital camera including a microphone and CPU that can receive voice command and voice messages (see column 6, lines 19-27).

It would have been obvious to a person skilled in the art to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532, and further in view of Safai et al., US 6,167,469, to have a voice processor to receive commands from the user, in order to make operation easier by allowing the user not to have to push buttons.

Allowable Subject Matter

8. Claims 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

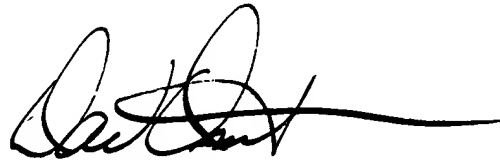
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal flourish extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER